

COST-BENEFIT ANALYSIS, STATIC EFFICIENCY, AND THE GOALS OF ENVIRONMENTAL LAW

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Abstract: The Essay suggests that environmental law may properly be sensitive to nonwelfarist and distributive considerations as well as overall human welfare. It summarizes the author's revisionary view of CBA as a decision-procedure roughly tracking overall welfare that incorporates an objectivist rather than preferentialist view of well-being, and that has a role to play even within a nonutilitarian of moral framework. And it explains that CBA does not (pace Driesen) involve a static conception of efficiency, a presupposition that technological change is exogeneous, or an assumption that individuals act rationally.

I. COST-BENEFIT ANALYSIS AND "STATIC EFFICIENCY"

Many thanks to David Driesen for organizing this conference, and for inviting me to participate. I should stress at the outset that I'm basically an applied philosopher, not an economist or a scientist. I'm interested in the application of moral philosophy to problems of public law, not only constitutional law but also administrative law and regulation, which have been relatively underexamined by philosophers. I've written, in particular, about the normative foundations of cost-benefit analysis (CBA). This is my work with Eric Posner,¹ and also some sole-authored work.² I'm not by any means an expert in environmental law—I've never written about it specifically, or even taught it—and so much of what I say over the next few days will be tentative.

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¹ Matthew D. Adler & Eric A. Posner, *Implementing Cost-Benefit Analysis When Preferences Are Distorted*, 29 J. LEGAL STUD. 1105 (2000) [hereinafter Adler & Posner, *Implementing CBA*]; Matthew D. Adler & Eric A. Posner, *Rethinking Cost-Benefit Analysis*, 109 YALE L.J. 165 (1999) [hereinafter Adler & Posner, *Rethinking CBA*].

² Matthew D. Adler, *Beyond Efficiency and Procedure: A Welfarist Theory of Regulation*, 28 FLA. ST. U. L. REV. 241 (2000) [hereinafter Adler, *Beyond Efficiency*]; Matthew D. Adler, *Fear Assessment: Cost-Benefit Analysis and the Pricing of Fear and Anxiety*, 79 CHI.-KENT L. REV. (forthcoming 2004); Matthew Adler, *Incommensurability and Cost-Benefit Analysis*, 146 U. PA. L. REV. 1371 (1998); Matthew D. Adler, *Risk, Death and Harm: The Normative Foundations of Risk Regulation*, 87 MINN. L. REV. 1293 (2003).

What I'll try to do in these comments is say something about CBA, as I understand it, and so at various points during the conversation you may hear me respond to criticisms of CBA by saying: "Well, that may be a valid criticism of CBA as traditionally understood, but it doesn't apply to CBA as correctly understood."

The traditional view of CBA says a couple of things.³ The traditional cost-benefit test is the sum of compensating variations. Imagine two outcomes, a status quo outcome and a project outcome. For any given person, her compensating variation is the amount of money, added to or subtracted from her resources in the project world, such that she is now indifferent between the two outcomes. She neither prefers the status quo world to the amended project world, nor vice versa. The traditional cost-benefit test says to aggregate these compensating variations across the population. If the sum is positive, then the project should be chosen over the status quo. If the sum is negative, then the status quo should be chosen.

The traditional view defends this test through some controversial normative commitments. First, the view adopts a preferentialist account of human welfare.⁴ It says that some person is better off with one outcome, as opposed to another outcome, just because he prefers the first outcome. It's the preferentialist account of welfare that explains why compensating variations are defined in terms of preferences. Second, CBA traditionally understood is committed to Kaldor-Hicks efficiency as a bedrock moral criterion.⁵ One outcome is Kaldor-Hicks efficient relative to a second outcome just in case there's, hypothetically, a redistribution of resources, from those who are better off in the first outcome to those who are worse off, that makes everyone better off. The traditional view of CBA says that Kaldor-Hicks efficiency has fundamental moral significance; and the sum of compensating variations test is seen as equivalent, or at least roughly equivalent, to Kaldor-Hicks efficiency.

I reject the traditional defense of CBA in several important ways. First, I deny that Kaldor-Hicks efficiency has any foundational moral significance. We can talk more about this during the conversation if you like, but suffice it to say that Ronald Dworkin, Jules Coleman, and others, responding to Richard Posner's efforts on behalf of Kaldor-Hicks

³ See Adler & Posner, *Rethinking CBA*, *supra* note 1, at 176–94.

⁴ See *id.* at 197–204.

⁵ See *id.* at 190–91.

efficiency, provided devastating critiques more than twenty years ago.⁶ I link CBA not to Kaldor-Hicks efficiency, but to overall well-being.⁷ To see the difference, consider that a transfer of wealth from rich to poor is not going to be Kaldor-Hicks efficient, or pass a cost-benefit test traditionally understood, but it will increase overall well-being assuming that—as seems quite plausible—money has diminishing marginal utility. In any event, I believe it is overall well-being, not Kaldor-Hicks efficiency, that provides the moral bedrock for CBA. My claim is not that overall well-being has *conclusive* moral significance, but rather that it has *prima facie* moral significance. If you think that overall well-being has conclusive moral significance—that nothing other than overall well-being matters morally—then you’re a utilitarian. Utilitarianism is one way to incorporate overall well-being within your moral theory, but not the only way. For example, you might have a mixed theory that incorporates a plurality of moral factors, including overall well-being, distributive criteria, perfectionist values that have no link to welfare—for example, aesthetic or environmental values—and deontological rights. Within this sort of pluralist theory, overall well-being has some weight—simply not overriding weight.

Note that claims about overall well-being assume the possibility of interpersonal welfare comparisons. I think those are possible, as at least some in the economics and philosophy literatures have thought—for example John Harsanyi, whose account of interpersonal comparisons is, I think, quite close to the mark.⁸

So one way I depart from the tradition is by linking CBA to overall well-being, not Kaldor-Hicks efficiency. The other way is by abandoning the preferentialist view of welfare that has been standard, and instead—this is my current thinking—adopting an objective view of welfare. Objectivism says that people are better off not in virtue of satisfying their preferences, but in virtue of realizing various objective goods: for example, life, bodily health, bodily integrity, the use of the senses, imagination and thought, the emotions, practical reason, affiliation, interaction with other species, play, and control over one’s environment. That’s Martha Nussbaum’s list, which I find fairly plausible.⁹ Objective goods, more formally, are not things that people ac-

⁶ See, e.g., Jules L. Coleman, *Efficiency, Utility, and Wealth Maximization*, 8 HOFSTRA L. REV. 509 (1980); Ronald M. Dworkin, *Is Wealth a Value?*, 9 J. LEGAL STUD. 191 (1980).

⁷ See Adler & Posner, *Rethinking CBA*, *supra* note 1, at 204–16.

⁸ See *id.* at 206–08.

⁹ MARTHA C. NUSSBAUM, *WOMEN AND HUMAN DEVELOPMENT: THE CAPABILITIES APPROACH* 78–80 (2000).

tually prefer. Rather, they're things that people ideally would prefer—if given full information, if they deliberated fully, and so on—or more precisely would prompt convergence of idealized preferences.¹⁰

Tying CBA to an objectivist rather than preferentialist account of welfare is less loony than you might think. If you look at actual administrative practice, agencies engaged in CBA reject preferences they think are distorted. For example, they don't count the satisfaction of sadistic preferences, homophobic preferences, racist preferences, or—in general—disinterested preferences that are motivated by political views rather than by a real welfare effect on the subject as benefits.¹¹ So there's a covert objectivism going on here in actual agency practice.

Thus far I've talked about how my understanding of the moral backdrop for CBA differs from the standard view. I also, relatedly, have a different understanding of the test itself. Traditionally, again, the CBA test is the sum of compensating variations. The better test, I suggest, is the sum of welfare equivalents. Given two outcomes, a status quo and a project, a person's welfare equivalent is the amount of money such that, added to or subtracted from his resources in the project world, he is just as well off in both worlds—given the objective goods he realizes in both worlds.¹² In effect, the notion of a welfare equivalent allows agencies to reject a person's expressed or revealed willingness-to-pay as reflecting a distorted preference—a preference that doesn't really track what's good for her. To be sure, this override power needs to be exercised cautiously, since people are often the best judges of their own welfare. To put the point another way, revealed or expressed willingness-to-pay is often the best *evidence* of someone's welfare equivalent. But still, the fundamental CBA test, in my view, is the sum of welfare equivalents, not the sum of willingness-to-pay.

And I understand this test as a procedure by which government implements the underlying criterion of overall well-being. Insofar as the underlying moral view is a pluralist view, such that overall welfare is one moral criterion among several, it's a mistake to think of CBA as a complete governmental choice-procedure.¹³ It would, in that case, simply be one part of the complete procedure. For example, imagine that you're a deep ecologist who thinks that two criteria are morally relevant to governmental choice: overall well-being, and the preservation of ecosystems and species quite apart from the effect of that on

¹⁰ See Adler, *Beyond Efficiency*, *supra* note 2, at 297–302.

¹¹ See Adler & Posner, *Implementing CBA*, *supra* note 1, at 1116–25.

¹² See Adler & Posner, *Rethinking CBA*, *supra* note 1, at 220–21.

¹³ See *id.* at 243–45.

welfare. Given this view, for environmental agencies to rely upon CBA as their exclusive decisionmaking procedure would be a mistake. Rather, CBA simply indicates the goodness of agency choices with respect to overall welfare. Imagine an agency decision of some kind that moderately decreases long-run overall welfare, but has a large effect in preventing the degradation of ecosystems. If the environment has intrinsic, nonwelfarist value, then the agency could be justified in undertaking the decision, all things considered, even though it decreases welfare. But CBA would point the other way. CBA tracks overall welfare, but perhaps not the totality of moral considerations relevant to the government. I'll say more on this point in Part II.

A final foundational point, related to this view of CBA as a decision procedure: CBA does not perfectly track overall well-being. The problem, going back to a point I made in criticizing the foundational view of Kaldor-Hicks, is that money has variable interpersonal utility. Money is an imperfect, not a perfect, measure of the effect of a governmental choice on someone's welfare. One can imagine a decision-procedure where welfare changes are measured in "utils" rather than dollars. The problem with this sort of procedure is, in effect, the bounded rationality and limited information of governmental decisionmakers and other humans. Given our familiarity with dollars, measuring welfare changes in dollar terms is a lot easier for us than measuring them in utility terms. Further, many, many goods and services are traded on markets. Market prices are some evidence, although certainly not perfect evidence, of welfare equivalents. We need to be careful about externalities and about distorted preferences, both of which might prompt a divergence between market prices and welfare equivalents. Still, at least for now, CBA seems like a much more feasible welfarist decision-procedure than a procedure calibrated in interpersonal utility units.¹⁴

I've spent a fair bit of time on foundations, but I think that it's important to be clear on what, I think, the best general understanding of CBA is, before we plunge into environmental law. To sum up: the CBA test is the sum of welfare equivalents, itself a rough, not perfect, guide for identifying whether agency choice increases or decrease overall well-being, which in turn has *prima facie*, not necessarily conclusive, moral significance.

Let me shift now to static efficiency. CBA, as I understand it, is not a particularly static test. First, CBA can, and is all the time, used to

¹⁴ *See id.* at 216–43.

analyze choices with intertemporal welfare implications. The welfare setbacks and benefits can occur in the future, perhaps in the distant future. For example, cleaning up a waste dump might impose costs now on the dump's owners, but prevent cancer deaths that would otherwise occur years or decades from now. That temporally remote welfare benefit certainly does count as a benefit for CBA purposes. It would be reflected in a positive, not zero, welfare equivalent to clean up the dump, among nearby residents, none of whom may gain an immediate benefit from the cleanup. To be sure, pricing remote costs and benefits raises the question of the discount rate—which is a crucial technical question for CBA, one that we may want to talk about this weekend—but any notion that CBA is limited to considering the short-term, rather than intermediate- or long-term effects of governmental choices, is mistaken.

Second, CBA is not committed to “static efficiency” as David Driesen defines it.¹⁵ He writes: “I refer to efficiency concepts that assume an unchanging technological state as static efficiency concepts.”¹⁶ There is nothing in CBA, certainly not as I have defined it, namely as the sum of welfare equivalents, nor for that matter as it’s traditionally defined, namely as the sum of compensating variations, that assumes an unchanging technological state. Let me repeat, because I am sure this will be a contested point in the discussion. There is nothing in CBA that assumes an unchanging technological state. Perhaps that assumption is a useful heuristic given the bounded rationality of CBA analysts, but if the heuristic is seriously misguided then it should be rejected. Imagine that requiring factories to remove some toxin from their waste streams would save ten lives a year. Imagine that compliance costs in year one, given technology available in year one, are \$100 million. But the requirement would induce the factories to pursue environmental innovations, or so regulators predict based on past experience. After five years, let us imagine, annual compliance costs can be predicted to drop to \$10 million. A static-efficiency analysis would assume that the current compliance costs continue indefinitely—in which case the regulatory requirement looks like a net loss, assuming a value of \$6 million per life saved. But a proper CBA *wouldn't* assume that current compliance costs continue indefinitely. Instead, the correct CBA would say that benefits in years one through five are \$60 million, costs are \$100 million, while

¹⁵ David M. Driesen, *The Economic Dynamics of Environmental Law*, 31 B.C. ENVTL. AFF. L. REV. 501, 508 (2004).

¹⁶ *Id.*

benefits in years six through infinity are \$60 million, and costs are \$10 million—in which case, depending on the discount rate, the regulatory requirement might well pass a cost-benefit test. There is just nothing in CBA, as I have defined it, or as it's traditionally defined, that requires the analyst to assume that compliance costs in future years would equal compliance costs in the first year of a regulation, or more generally to assume an unchanging technological state. I haven't checked through regulatory impact analyses (RIAs) on this point—my interest lies much more in the pricing of nonmarket goods than in the measurement of compliance costs—but I'd be astonished if there weren't RIAs where agencies indeed posited intertemporally variable compliance costs.

I should emphasize that I'm quarreling with David Driesen here about the definition of CBA. He assumes it to be a much more static methodology than it is. I'm *not* quarreling with him about the nature of environmental innovation. This is an area where I have zero expertise, and am therefore agnostic. David in his handout and in his book makes a number of claims about the way in which regulation spurs innovation that strike me as plausible. For example, stringent regulation produces more innovation than laxer regulation.¹⁷ Relatedly, "emissions trading probably weakens net incentives for innovation," because it diminishes innovation incentives for high-cost firms more than it increases innovation incentives for low-cost firms.¹⁸ More generally, past estimates of the costliness of pollution controls have often been overstated. They have been overstated by firms, which have an incentive to overstate them to resist governmental regulation, and by economists and government analysts, who have failed to realize that technological change is endogenous, not exogenous, to governmental regulation. Imposition of an antipollution regulation itself, often, induces qualitative improvements in environmental technology sufficient to make the regulation cost-effective. These claims may well be true. I'm not going to speak to them here. What I am trying to underline is this: nothing in my commitment to CBA compels me to think that the claims are false. David's claims about the effect of pollution regulation on environmental innovation are, in effect, broad, empirical claims about the endogeneity and time path of compliance costs, which if true should be incorporated within sophisticated CBA by environmental agencies.

¹⁷ *Id.* at 527–28.

¹⁸ *Id.* at 519–20.

Similarly, I should emphasize, CBA does not involve an a priori commitment to particular regulatory techniques. Simplistically, let's distinguish between traditional command-and-control regulation, where polluters are instructed to adopt particular technologies (scrubbers, say); performance standards, where polluters are instructed to meet certain pollution goals (emissions of chemical Y may not exceed X tons per year); and market-mimicking schemes, such as pollution taxes or tradable emissions permits. Believing in CBA as an analytic tool for governmental choice doesn't necessarily mean believing in market-mimicking regulatory schemes, as opposed to technological standards or nontradable performance requirements. Which is best is strictly an empirical question. For example, if the regulatory agency is deciding between implementing a given reduction in emissions through nontradable performance requirements versus tradable rights, and the CBA analyst believes, *à la* Driesen, that compliance costs will fall more quickly with a scheme of nontradable performance requirements, then the analyst will conclude that the scheme of nontradable requirements has greater net benefits, relative to the status quo, than the tradable rights—and therefore that a proper CBA, in this instance, opposes tradable rights.

There is an analogy, here, to the debate within law and economics about rules versus standards. Legal requirements might be formulated in a precise, rule-like way. "Don't go more than sixty miles per hour." "Put air bags or seat belts in your car." "Don't provide legal advice for money unless you've gone to law school for three years and passed the bar." Or, the law might be formulated using more open-ended, fuzzy standards. "Exercise due care." "Undertake good faith efforts to mitigate damages." "Avoid the appearance of impropriety." Rules are overinclusive and underinclusive, but are easier for actors to correctly and credibly comply with than standards; compliance with standards is more difficult to monitor; even well-meaning actors may apply them incorrectly; and they're less successful in engendering reliance than rules. In some contexts, rules maximize welfare, as compared to standards; in other contexts, standards maximize overall welfare. Good law and economists are agnostic as between the two. Good law and economists are agnostic as between rules and standards even though they're committed to overall well-being or its poor relation, namely Kaldor-Hicks efficiency. Overall well-being is an evaluative criterion; by contrast, the rules-standards debate is a debate about regulatory form. Analogously, CBA is an evaluative procedure, a methodology by which agencies can evaluate rules and other choices; by contrast, the debate about command-and-control regulation versus

performance standards versus tradable rights is a debate about regulatory form, which the cost-benefit proponent views, or should view, as an open, empirical debate.

A final point along these lines: an underlying theme in David's work is bounded rationality. Private individuals are boundedly rational. They have limited information and, even more damagingly as a matter of traditional economic theory, limited conceptual, logical, and mathematical abilities. Relatedly, individuals don't maximize expected utility. Rather, they "satisfice;" they make probability mistakes; they exhibit endowment effects; they do, or may do, all the things that Herbert Simon, Tversky and Kahneman, and the behavioral economists and psychologists more generally have led us to expect.¹⁹ And insofar as behavioral economics generates better predictions about human behavior than traditional rational choice models, CBA needs to incorporate the wisdom of behavioral economics. A very simple example: if behavioral economics predicts that consumers will fail to react to warning labels providing probability information, then a CBA of the labels should count them as having zero benefits even though, were consumers rational, the labels would have positive benefits.

To sum up: just as CBA needs to be reconstructed along objectivist and welfarist, rather than Kaldor-Hicks, lines, so it needs to be distinguished from certain views that may be held by economists but are really no part of CBA: not CBA as I've reconstructed it, and not even CBA in the traditional sum of compensating variations form. These are claims about the exogeneity and static quality of technology, the preferability of market-mimicking regulatory forms, and the conformity of actual human behavior to a rational actor model. CBA, and a belief in the moral importance of overall welfare, don't entail any of these claims.

II. COST-BENEFIT ANALYSIS AND THE MORAL FOUNDATIONS OF ENVIRONMENTAL LAW

What do I have to say about the principles that should guide environmental law? Let me try to engage this question at two levels: first, at the level of underlying moral principles, rather than at the level of the governmental decision-procedures that implement those principles; and second, at the level of decision-procedures. I'll spend most of my time at the first, bedrock level, but will try to finish by looping

¹⁹ See generally REID HASTIE & ROBYN M. DAWES, *RATIONAL CHOICE IN AN UNCERTAIN WORLD: THE PSYCHOLOGY OF JUDGMENT AND DECISIONMAKING* (2001).

back to the topic of decision-procedures and CBA, which is what I focused on in Part I.

Underlying moral principles: in my defense of CBA yesterday, I said that CBA was consistent with a wide range of moral views. All that was required was that the view give *prima facie* weight to overall well-being. One could have a pluralist view, incorporating overall welfare, distributive concerns, deontological rights, and environmental or aesthetic values detached from welfare. To put the point another way, this pluralist moral foundation would have a consequentialist part and a nonconsequentialist part. Roughly, consequentialism says: "Achieve good outcomes."²⁰ For example, maximize overall welfare. Or maximize the equal distribution of welfare. Or, maximize the number of species, or the flourishing of ecosystems. By contrast, nonconsequentialists advance putative deontological rules, which actors are supposedly required to follow even though compliance rules might have bad consequences.²¹ The classic example: a deontological or nonconsequentialist rule that prohibits the actor from killing someone, even if the consequence of the killing would be to prevent five killings. (For example, no killing a would-be mass murderer to prevent the killing spree he has planned). Another example: a deontological prohibition on torture, namely a proscription on performing an act of torture, even where that would prevent multiple acts of torture. It is possible to have a moral framework that has both consequentialist goals, and deontological rules, and to see CBA as part of the decision-procedure for implementing the consequentialist goals.

This kind of moral framework, I think, is mistaken. The belief that there are really deontological moral rules is misguided, I now think. I don't say this out of a general moral skepticism, since I think that some moral norms or criteria really exist. For example, it's really, truly morally wrong for government to decrease overall welfare in a way that has perverse distributive consequences—by benefiting the rich at the expense of the poor—and no environmental benefit. So I'm a moral realist. I just now deny that the set of real moral requirements includes deontological rules. Deontological rules might be very good heuristics; legal rules, as opposed to moral rules, might well be deontological in form; there might be good, evolutionary reasons why deontological moral beliefs have evolved in human society. But morality, at the bedrock, is consequentialist in form. Deontological rules

²⁰ See SHELLY KAGAN, *NORMATIVE ETHICS* 59–77 (1998).

²¹ See Adler, *Beyond Efficiency*, *supra* note 2, at 314.

invoke a distinction between action and inaction, or between what's intentional and what's merely foreseen, that, it seems to me, is morally epiphenomenal. Obviously I can't demonstrate to you right now that consequentialism is correct—this is the kind of foundational issue that philosophers have been debating for millennia—but, if we're articulating basic principles to guide environmental law, I would start by espousing consequentialism.

I should say that the consequentialism/nonconsequentialism choice has real implications for environmental law. Imagine that you think people have a deontological right not to be killed. Then that might well shape your risk assessment practices. For example, as between activities that amount to deontological killings—releasing a toxic gas into a neighborhood, with immediate toxic effects, a la Bhopal—and activities that cause deaths but aren't deontological killings—selling a dangerous product that many well-informed consumers buy, with many resulting deaths—the deontologist might think that government should give priority to preventing the killings. I don't. The killing/dying distinction is not, I think, a relevant one for environmental policy, although there may well be important distinctions between kinds of deaths. Some deaths are much worse for human welfare than others.

Consequentialism, it should be stressed, is a pretty big tent. There are welfarist versions and nonwelfarist versions.²² The basic idea behind consequentialism, as I've already suggested, is that the moral rightness and wrongness of choices reduces to the goodness and badness of the outcomes that result from these choices. What makes an outcome better or worse? Welfarists say: human welfare, and nothing else.²³ Nonwelfarists say: it's more complicated. There is nothing crazy about nonwelfarist consequentialism, and here I really am agnostic. Some of you may know a recent book by Kaplow and Shavell, where they argue for welfarism, and suggest that any nonwelfarist view is just confused, virtually incoherent.²⁴ In particular, the fact that a moral view might sometimes rank a Pareto-inferior outcome over a Pareto-superior outcome is, they think, a *reductio ad absurdum* of the view.²⁵ I disagree. Nonwelfarist consequentialisms, which might sometimes require regulators or other actors to make everyone worse off, are, I think, perfectly thinkable moral views.

²² See *id.* at 315–17.

²³ See LOUIS KAPLOW & STEVEN SHAVELL, *FAIRNESS VERSUS WELFARE* 16 (2002).

²⁴ See *id.*

²⁵ See *id.* at 52–58.

Imagine that a distant planet has an odd color that spoils our view of the night sky. The planet has a flourishing ecosystem: no conscious or sentient creatures, just loads of bugs, trees, amoebas, and other non-sentient creatures interacting. Intuitively, I submit, it would be wrong for us to blast the planet out of the night sky, even if it were true, and we were sure, that the planet's resources would never be of any use to humans and that there would be no other deleterious effects of the blasting—say, setting a bad precedent, or making us feel guilty. Now, the intuition may be wrong, but at a minimum anyone grappling with the foundations of environmental law needs to grapple with the possibility that ecosystems, species, and other aspects of the environment might have intrinsic moral significance—within consequentialism, no less. So at this point I'm raising a question rather than offering an answer: is an outcome with a flourishing environment intrinsically better, *ceteris paribus*, than one without, and if so what exactly does a flourishing environment mean here?

It might be objected that the choice between welfarist and nonwelfarist consequentialism isn't really relevant to environmental policy, since environmental degradation always has profound welfare effects, particularly once we take into account future generations. Preventing the degradation is morally overdetermined; whether or not intrinsic environmental values are added to the balance, we should just prevent degradation in virtue of the welfare-based reasons for maintaining a pristine environment. But of course the claim that the welfare benefits of environmental regulation will always justify the welfare costs isn't true at the margin, and invoking costs to future generations raises other puzzles—for example, discounting puzzles and nonidentity puzzles (whether a policy that changes who exists in the future should be seen as having costs or benefits beyond the present generation).

One point of clarification: nonwelfarist consequentialism doesn't deny the moral significance of human welfare. It simply claims that other attributes of outcomes are also morally relevant. To flip the point around: both welfarist and nonwelfarist consequentialism agree that the goodness and badness of outcomes is substantially, if not exclusively, a matter of human welfare. So let me turn to that part of the moral bedrock. In the time remaining, let me do two things. First, I'll say something about the role of distributive considerations. Second, I'll turn to the problem of decision-procedures and our old friend CBA. I apologize for the number of topics that I'm trying to cover in a quick period, but I'm trying to give you my sense of the overall moral terrain as it bears on environmental law.

Distributive considerations: to what extent should we be morally concerned about the distribution of welfare, rather than merely aggregate welfare?²⁶ Environmental lawyers might think that the choice between more versus less egalitarian consequentialisms—like the choice between deontology and consequentialism, or the question about the intrinsic nonwelfarist value of the environment—doesn't have much practical bearing on environmental law. They might think that the winners and losers of environmental choices generally have the same average wealth or welfare level, so that distributive considerations wash out. Or, they might think—as do some economists—that distributive considerations are always best handled by the tax system. On both counts, I suggest, they may well be wrong. The point of the whole environmental justice movement, quite correct, is that regulatory choices, including the choice of inaction, by environmental agencies can have welfare effects that are starkly skewed along class or racial lines. Relatedly, insofar as environmental choices exacerbate inequality by causing death, those distributive consequences may be difficult or impossible to reverse through the tax system. If a policy of allowing waste dumps to locate in poor neighborhoods causes a disproportionate number of cancer deaths among the poor, tax subsidies to the deceased won't, even in theory, correct for the skew. So again, here, I'm raising an issue rather than arguing for a principle: environmental scholars don't, I think, need to grapple with the content of deontological rules, but they do need to grapple with the problem of designing environmental law to accommodate both considerations of overall welfare and distributive goals.

Now, there's a simple way to accommodate the two. The simple way is to posit a single consequentialist goal that merges utilitarian and distributive notions: namely, the goal of aggregate *weighted* welfare. The technical name for this, within philosophy, is prioritarianism.²⁷ We measure each person's welfare on an interpersonal utility scale. We then multiply that number by a weighting factor which is inversely proportional to the level of welfare. And we sum the numbers to determine how good the outcome is. In other words, prioritarians give greater weight to those who are worse off in determining the overall goodness of outcomes. The weighting factor might be more or less dramatic. Utilitarianism is a limiting case of prioritarianism, where the welfare weights are equal across persons. Rawls' maximin is the limiting

²⁶ See Adler, *Beyond Efficiency*, *supra* note 2, at 317–19.

²⁷ See *id.* at 309–11.

case in the other direction, where welfare gains to the poor take lexical priority over losses to the rich.²⁸ Is prioritarianism the right way to integrate utilitarian and distributive concerns within our moral view? If it is, then there's a relatively straightforward way to reconcile equality and overall welfare at the level of governmental choice: namely, by using a variant of CBA that uses distributive weights, inflating the gains and losses of the poor—those whose overall welfare levels are low—and deflating the gains and losses of the rich. But it's a hotly contested issue within modern philosophical thinking whether prioritarianism really is the best way to make sense of our concern for fair distribution.

So I've ended up, as promised, back at CBA and decision-procedures. Deontological moral rights have been cleared away. Environmental policymakers needn't worry about those. If, in addition, we plump for welfarist consequentialism—concluding that the environment has no intrinsic value, beyond its importance for human welfare—and for a prioritarian view of fair distribution, then we would be inclined to see CBA as a master procedure for governmental choice. CBA, with appropriate distributive weights, would then, at least roughly, track everything that matters morally. If, alternatively, the moral view is nonwelfarist, or welfarist but not prioritarian, then environmental decisionmakers won't be able to use CBA as their exclusive decision procedure. Our enthusiasm for CBA would have to be a bit more tempered.

Two final, crucial caveats: one concerns deliberation costs, the other political economy. As for deliberation costs: CBA, itself, is expensive. So, even just as a matter of implementing overall welfare, it's not the case that agencies should always use CBA. This point is reflected in the current cost-benefit order, 12,866, which requires full-blown CBA only for rules, not other decisions, and only for major rules (with an economic impact exceeding \$100 million).²⁹ How agencies should maximize welfare when, *ex ante*, the deliberation costs of CBA are too high is an excellent question that needs additional work.

Second, my commitment to CBA is itself, ultimately, empirical and contingent. If it could be demonstrated that, given the abilities and biases of governmental regulators, the information available to them, and the political environment in which they operate, some mechanism other than CBA better sorted between welfare-enhancing and welfare-reducing rules, I'd gladly change my stripes. This mecha-

²⁸ JOHN RAWLS, *A THEORY OF JUSTICE* (1971).

²⁹ Exec. Order No. 12,866, 58 Fed. Reg. 51,735 (Sept. 30, 1993).

nism could be an analytic technique, for example, asking regulators to measure projects in interpersonal utility terms not dollar terms, or an institutional design, for example, substituting reg-neg for CBA. I'd ask anyone who shares my view that overall welfare has moral significance, but is skeptical about CBA, to offer a concrete alternative for implementing that criterion. Show me the better, welfare-maximizing mousetrap, and I'll buy it. So far, I haven't seen it.

